User´s Manual

English

Digital Satellite Receiver

DX 2202

seit 1927

zehnder

Satellitenempfangstechnik

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1. General Information

The ***DX 2202*** allows you to view a variety of satellite programs. This user's guide covers the installation of the ***DX 2202*** and the necessary steps to operate various features. It also explains special features available only in this ***DX 2202*** in detail, and will allow you to take full advantage of these features.

1.1 Main Features

- Fully MPEG2, DVB compliant
- PIG (Picture In Graphic) support DiSEqC1.2 positioner for multi-satellites (63 satellites)
- C/Ku band control for each antenna
- User Friendly and easy-to-use menu system
- Various channel editing functions (favorite, moving, locking, renaming, deleting and sorting)
- User programmable various satellite & transponder information
- Automatic search for newly added transponder (Network Auto Search)
- Stores up to 4000 channels
- Easy and fast software upgrade through RS-232 port
- Plug-and-play data transfer system (DSR to DSR)
- Timer function (10 events), automatically turns On/Off by setting function (daily, weekly, monthly, one time), programmable through EPG
- Automatic reserved channel moving system
- Electronic Program Guide (EPG)
- OSD Teletext (DVB ETS 300 706) and Subtitle function support
- VBI Teletext support
- Picture zoom function
- Multi picture screen (4/6/9)
- Provides various switch types, LNB types and NTSC/PAL monitor type
- SCPC/MCPC receivable from C/Ku band satellite
- Multi LNB controlled by DiSEqC 1.2 and 22KHz
- 256 color On-Screen-Display
- Automatic PAL/NTSC conversion
- Automatic last channel saving
- Dolby Digital AC 3 (coaxial)
- Main on/off Switch

1.2 Safety instructions

The following section contains important information relating to operation, place of installation and connecting-up of the receiver.

Read these notes carefully before putting the unit into operation.

Important notes regarding operation

- **Extended absence / Thunderstorms**

  Always switch the unit off via its mains switch during periods of extended absence or at the onset of thunderstorms. This also applies to any other equipment attached.

- **Mains lead**

  Make certain that the mains lead (power supply lead) is undamaged. Never put the unit into operation if the mains lead is damaged.

- **Cleaning**

  Withdraw the mains plug before cleaning the unit. Use a dry cloth for cleaning.

- **Children-at-play**

  Pay attention that children do not insert objects into the ventilation slots. There is a risk of mortal danger due to electric shock.

- **Repairs**

  On no account remove the housing cover since there are dangerous voltages inside the unit that may be contacted. The und must only be opened by qualified specialists, so allow them to carry out any repairs or adjustments to your receiver. Unauthorised opening entails loss of guarantee.

  The electrical safety of the unit can be affected by improper tampering with it.

  The manufacturer's liability excludes accidents occurring to the user when the unit is opened.

Important notes for sitting and installation

- **Place of installation**

  Every electronic device generates some heat. The rise in temperature, however, lies within safe limits. Nevertheless, this does not rule out the possibility of slight colour changes to sensitive furniture surfaces and veneers over time due to the constant effect of heat.

  In conjunction with treated furniture surfaces, the unit's rubber feet can likewise give rise to changes in colour. Where necessary, place the unit on a suitable pad.

- **Ventilation**

  The heat that is generated in this unit is dissipated quite adequately. Never install the receiver in a cabinet, shelf or rack with inadequate ventilation. Never close-off the openings on the unit that are intended for heat dissipation.

  Do not place objects on top of the unit. Maintain a clearance of at least 10 cm above the unit so that the heat generated within the unit is convected away without obstruction.

- **Mains voltage**

  Run the receiver only from a mains voltage of 23OV / 5O/60Hz.

  The unit is not to be connected to the mains until after all the installation work has been completed.

- **Humidity**

  Protect the unit against humidity, drips and splashes.

- **Solar radiation/heat**

  Do not place the receiver close to radiators nor expose it to direct sunlight.

- **Grounding**

  The parabolic antenna is to be grounded in accordance with regulations. Here, the relevant German VDE regulations (or equivalent) are to be observed.

Connecting up and putting into operation

- **Attention**

  The following section is intended specifically for the specialist dealer. If you are not carrying out the installation yourself, there is no need to pay any attention to this section. A sample configuration is to be found in section: "Connection examples".

  Do not connect the unit to the mains until after the installation work has been carried out properly.

  Please note the guidance given in section: “Safety- and Installation instructions”.

1.3 Unpacking

Unpack the ***DX 2202*** and check to make sure that all of the following items are included in the packaging.

- 1 x Remote Control Unit (RCU)
- 1 x User’s Guide
- 2 x AAA batteries
- 1 x DX 2202

1.4 General Operation of the *DX 2202*

Throughout this manual you will notice that the everyday operation of your ***DX 2202*** is based on a series of user friendly on screen display and menus. These menus will help you get the most from your ***DX 2202***, guiding you through installation, channel organizing, viewing and many other functions.

All functions can be carried out using the buttons on the RCU, and some of the functions can also be carried out using the buttons on the front panel.

Please be aware that new software may change the functionality of the ***DX 2202***.

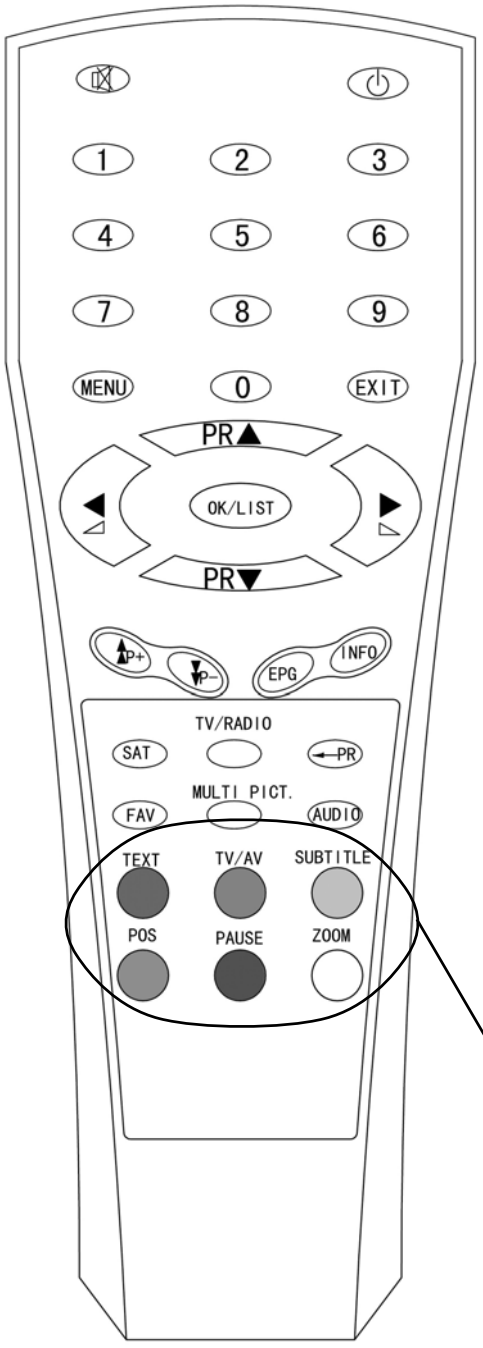
Should you experience any difficulties with the operation of your ***DX 2202***, please consult the relevant section of this manual, including the Problem Shooting.

Hotline ☎ in Germany, in case of questions !

Daily between 8.00 – 16.00 h

Phone: +49 (0)900 183 22 55 (25 Cent per Min.) e-mail: Service@Zehnder-SAT.de

1.5 Remote Control Unit



Key	Function
⏻	Turns power ON/OFF of the DSR.
🔇	When watching a channel, enables/disables the audio.
0~9	Enter number of the required menu item or Select a channel number to watch .
MENU	Press this key one time to run menu on screen, and call command box.
EXIT	Returns to the previous menu on the menu screen or escape from the menu.
PR+,PR-	When watching a channel, change channels, or moves to the next higher or lower item in the menu.
◀▶▲▼	When watching a channel, adjust the volume, or move to the left or right item in menu. Moves up/down a page in the channel list.
OK, LIST	Executes the selected item in the menu screen, or enters the desired value in any input mode
INFO	Calls up the EPG (Electronic Program Guide).
INFO	Shows information of the current channel.
TV/RADIO	Switch between TV and Radio mode.
SAT	Display the satellite list or searched channel..
← PR	Switches back to previous channel.
FAV	Display the favourite channel list.
AUDIO	1.When watching a channel, switches the audio languages. 2. Selects the different audio modes for speakers: Stereo, Left, right.
MULTIPICT	Makes 4, 6 or 9 pictures to the screen
TEXT *red*	1. Switches to teletext or subtitle mode. 2. Menu operations with *red* button.
TV/AV *green*	1. Switches between TV or AV mode. 2. Menu operations with *green* button.
SUBTITLE *yellow*	1. Switches to subtitle of DVB-S standard. 2. Menu operations with *yellow* button.
POS *grey*	1. Displays position bar on the screen to adjust the antenna or for manual search. 2. Menu operations with *grey* button.
PAUSE *blue*	1. To still picture in current channel 2. Menu operations with *blue* button.
ZOOM *white*	1. Opens a frame to zoom the part of picture 2. Menu operations with *yellow* button.

1.6 Front Panel

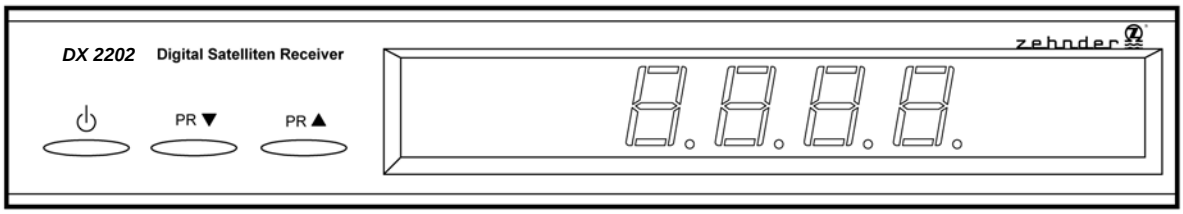
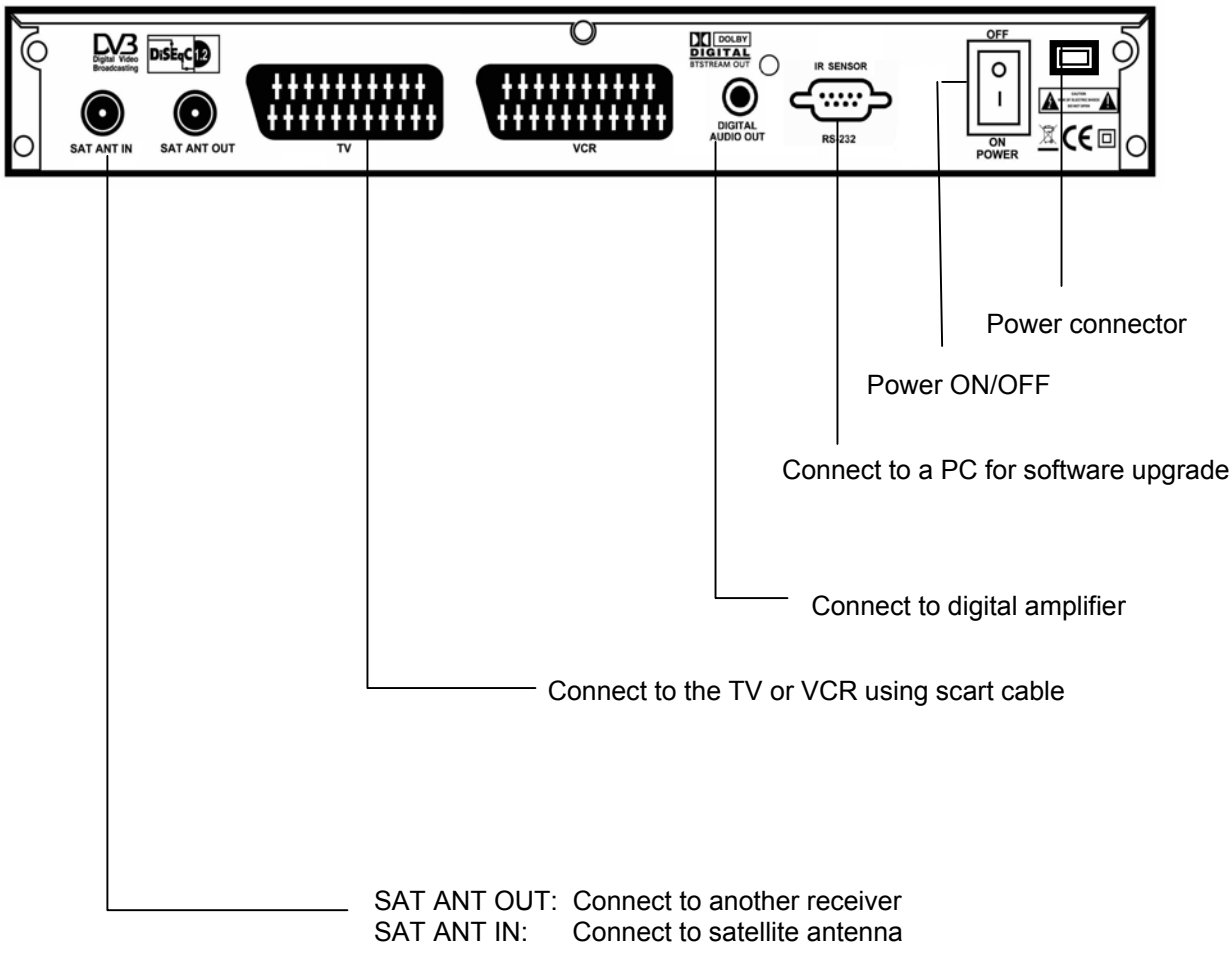


Figure 2: Front Panel

KEY	FUNCTION
Power	Turns on and off the power of the receiver (standby).
PR V/Λ	When watching, changing to the previous and next channel, or moves to the next higher or lower item in the menu

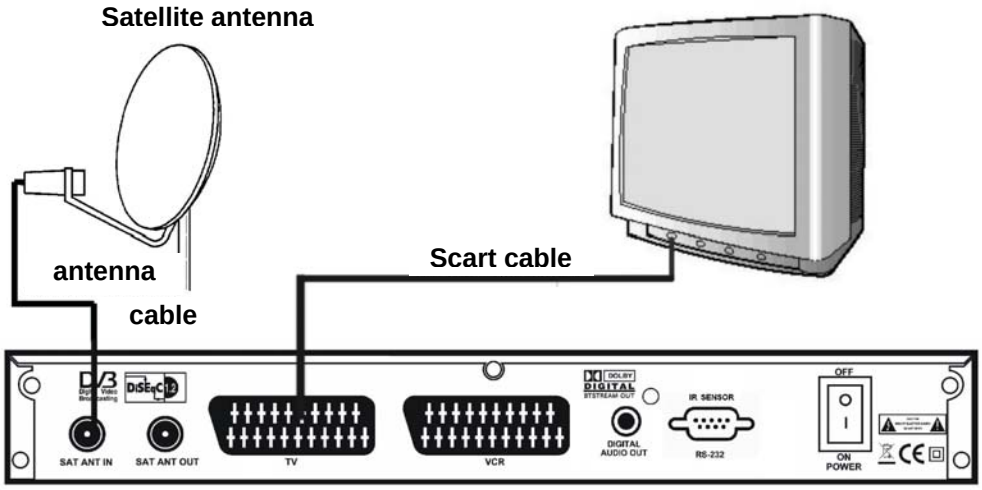
1.7 Rear Panel



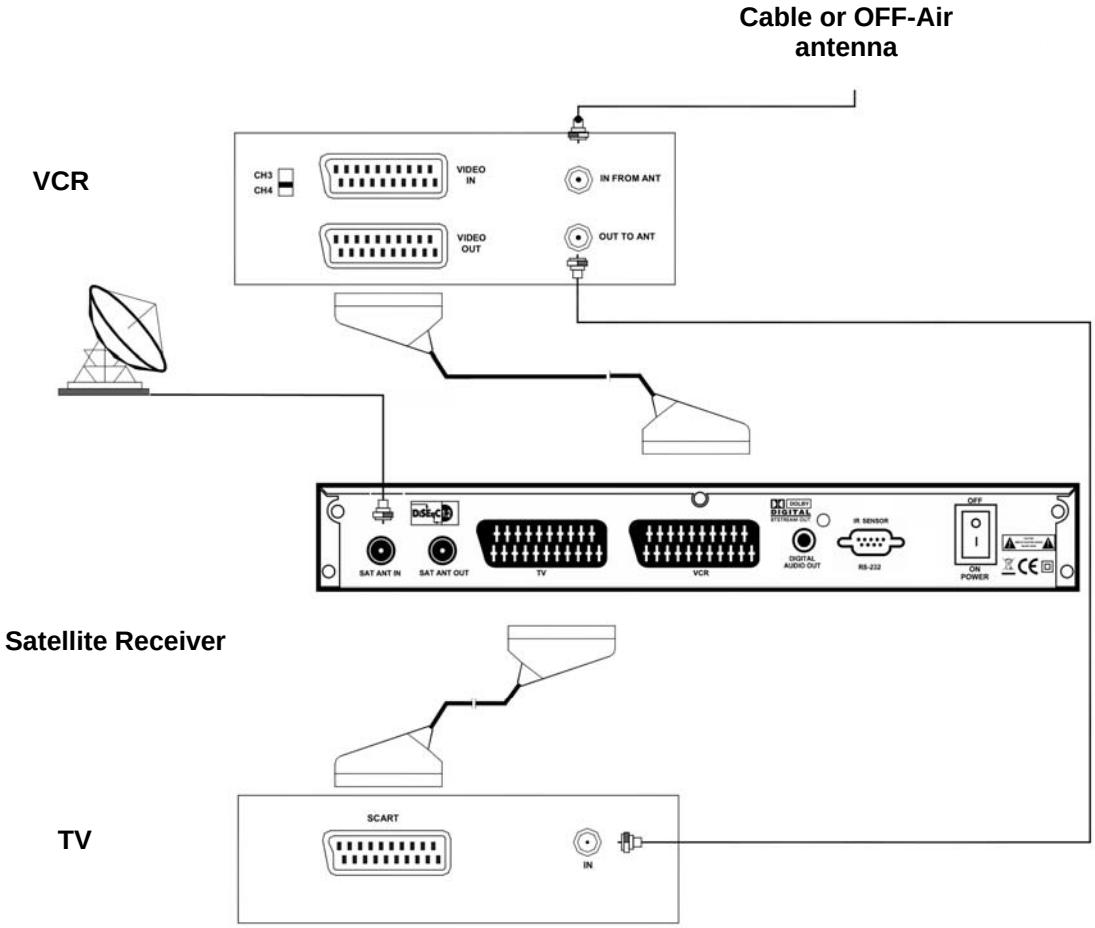
2. Installation of *DX 2202*

This section explains the installation of ***DX 2202***. Refer to the manuals supplied with the equipment for the installation of outdoor equipment such as the dish antenna. When adding new equipment, be sure to refer to the related parts of the manual for the installation and be sure you have correctly adjusted the antenna to a satellite.

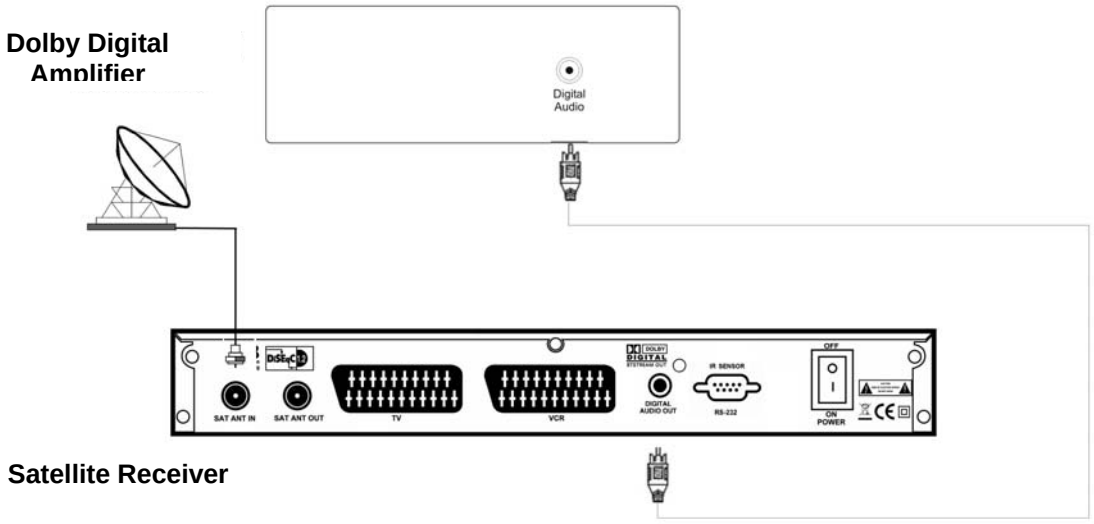
2.1 Connecting to Antenna and TV



2.2 Connecting to TV/VCR using SCART Support



2.3 Connecting to Digital Amplifier



3. Menu Information

Once you have installed and connected the cables of the ***DX 2202***, the menu is displayed.

This menu consists of 4 main menus as shown below.

- Channel Manager (chapter 7)
- Installation (chapter 4)
- Preferences (chapter 5)
- Timer (chapter 9)

During the installation the **OK** key confirms a selection and ◀▶ key shows the Drop Down List Box. You can also use the numeric keys on the RCU to enter a numeric value.

Use the **PR+, PR-** key to move up or down from one line to another line. Use the − + keys to change parameters in sub menus.

To escape the menu system at anytime, press **EXIT** key on the RCU.

4. User Installation

This menu consists of 5 sub-menus as shown below.

- Antenna Settings
- Automatic Search
- Manual Search
- Motor Setting
- Factory Default

4.1 Antenna Settings

1. **Satellite name**: Select first satellite you want.
2. **Transponder**: Select desired transponder.press OK key will Display a down list box which also let's you select desired transponder.
3. **LNB Type**: Select you LNB type.
4. **Low Freq.(MHz)/High Freq. (MHz**): Enter the proper LNB Frequency referring to your LNB using the numeric keys On the RCU or use the KEY PAD displayed by pressing OK key.
5. **SWITCH (22K,0/12V**): you can select the switch with you want to configure the antenna.
6. **DiSEqC Switch Setting**: Select DiSEqC with you want to configure the antenna.
7. **LNB Power**: If your DSR is connected the LNB, Select LNB Powr off or 14V, 18V, Auto.

In this menu, press **Automatic Search** key (Red colour key) on the RCU to jump to automatic search menu, press **Manual Search** key (Green colour key) on the RCU to jump to manual search menu.
When you press **OK** key on the RCU, the message “Would you like to set the value of current position?” will be displayed.

4.2 Automatic Search:

In this menu after pressing white button you can select NIT Search ON or OFF, as well as only FREE channels, only scrambled channels (CAS) or ALL. Select search channel mode. Than press blue button, the DSR will automatic search as shown below:

In this menu, press OK key to confirm satellite, than press Scan key (Blue colour key) on the RCU to search satellite, the screen will display a sub-menu as below:

4.2.1 Edit Name

In automatic search menu, if you want to change satellite name, press Rename key (Yellow color Key) on the RCU, The screen will display the command box. The keypad dialog will appear. Using the arrow keys on the RCU, you can edit satellite name.

In this menu after pressing green button you get to the Manual Search menu.

4.3 Manual Search/Edit Transponder

8. **Satellite Name**: Select first satellite you want.
9. **Transponder**: Select desired transponder.press OK key will display a down list box which also let's you select desired transponder.
10. **Frequency** & Symbol Rate: Edit the frequency and symbol Rate. You can use delete TP key (Green colour key) on the RCU to delete current frequency and symbol rate.
11. **Polarization**: select HOR or VER polarization mode.
12. **Search Type**: select search type: you can select only FREE channels, only scrambled channels (CAS) or ALL channels
13. NIT Search: set NIT Search ON or OFF.

Than press blue button, the DSR will search only on this one transponder frequency as shown below:

4.3.1 Add Transponder

In Manual Search menu, press Add TP key (White colour key) on the RCU, the screen will display a submenu, in this sub menu, you can add the frequency and symbol rate, select Hor or Ver polarization mode to add new transponder.

4.3.2 Delete Transponder

Delete TP : If you want to delete a Transponder, please select the Transponder which you want to delete and then press **Green button** on the RCU. A confirm message box will be displayed. Confirm by YES to delete.

4.3.3 Set PID

If you want to search only one specific channel, from which you have all details set PID(Packet Identifier) manually, Press Set PID key (Yellow color key) on the RCU, the screen will display a sub-menu, enter the current value and select OK .

4.4 Motor Setting

Select Motor setting than press OK key, the screen will shown as below:

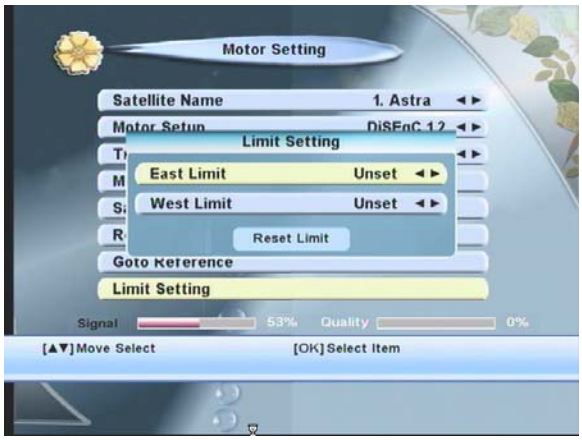
1. Satellite Name: Select first satellite which you want.
2. **Motor Setup:** Select Disable or Enable. If you select Enable option, you can operate as below.
3. **Transponder:** Select desired transponder.
4. **Move:** Use VOL- and VOL+ keys on the RCU to let motor move to west or east setup.
5. Execute command "**Save Position".**

Recalculate All Positions : When all the locations of searched satellites are shifted for any reason, you can realign all of them once you adjusted one satellite location.

Goto Reference: When you install the motor of DiSEqC 1.2 antenna, you can select this function to move the center of the antenna to 0°.

Limit Setting: East West Limit

On selecting **Limit Setting**, the **Limit Setup** menu will pop up. Pressing the Left key on the RCU continuously will take you to the eastern most point. Press the **OK** key on the RCU. The message "Would you like to set East limit of DiSEqC motor?" will be displayed for your confirmation. Place cursor on the **OK** button on the screen and press **OK** key on the RCU to confirm the East limit.



To set West limit, follow the same steps as East limit.

Reset Limit

Place the cursor on Reset Limit button and then press **OK** key on the RCU. The message "Would you like to reset limit for DiSEqC positioner?" will be displayed for your confirmation. Select **OK** button by pressing **OK** key on the RCU.

4.5 Factory Default:

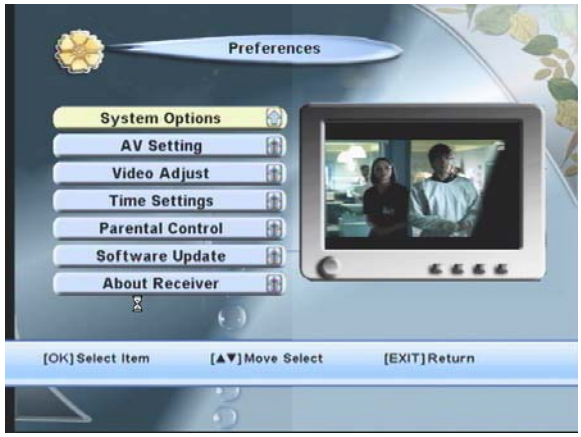
If you want to bring DSR back to the factory default condition, select factory default and press OK button. Than a warning message will displayed. To confirm, select YES.

Warning: On selecting factory default you will lose all of data and information, which was previously installed.

5. Preferences

This menu consists of 7 sub-menus as shown below:

1. System Options
2. AV Setting
3. Video Adjust
4. Time Setting
5. Parental Control
6. Software Update
7. About Receiver



5.1.System Options

1. OSD Language: Select OSD language out of about 8 languages.
2. OSD Transparence: Set OSD transparence from 1 to 10.
3. OSD Timeout: Set OSD timeout from 1 Sec to 10 Sec for automaticly fade out OSD.
4. Remote System: You can set to code B if you have a Dual Remote Control FB22 from Zehnder to use different RCU IR codes by pressing SHIFT button.

5.2.AV Setting

1. Screen Ratio: Select 4:3, 16:9 or LetterBox screen ratio depending on your TV screen.
2. Black Freeze: Select black freeze Yes or No.
3. Monitor Type: You can adjust the TV system type of your TV set Auto, PAL, NTSC,SECAM.
4. Video Output: If your SCART supports RGB control, Select RGB. Otherwise select CVBS.

5.3 Video Adjust

Set OSD brightness, contrast, saturation and hue to adjust video picture in steps of 1-20.

5.4 Time Settings

Usually you get the information real time from the satellite Automatically but sometimes they transmit wrong information. In that case, you can adjust the real time using this function.

Set Local time (GMT Offset) for central Europe to +1.00h. During Summer Time switch this option to ON

5.5 Parental Control

This function allows you lock the channel with a password in order to prevent children from accessing the channel. You can also protect your installed data and information using the Install Lock.

How to change the Password: Enter the current password.

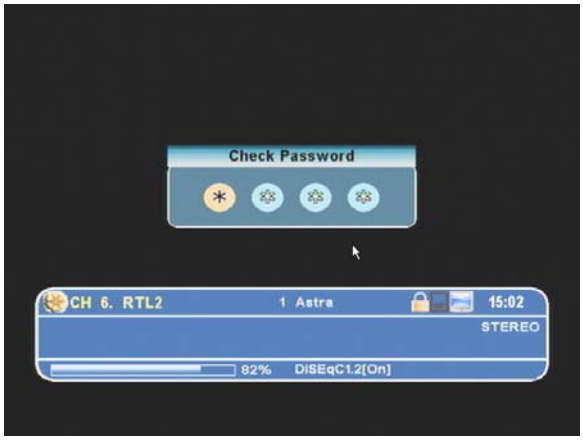
2. Select ON of Parental Lock.
3. Enter new password.
4. Confirm your new password entering new password again.

Note: Default password is 0000.

In case you forgot your personnel password the master code is 2381.

How to use Parent Lock

1. To activate parent lock function, go to the TV channel Manager Page.
2. Press Lock key (Green colour key) on the RCU.
3. Select the channel which you want to Lock.
4. Press OK then 🔒 symbol is displayed.



If you then select locked channel you will be asked for the password before you can watch the channel.

How to use Install Lock

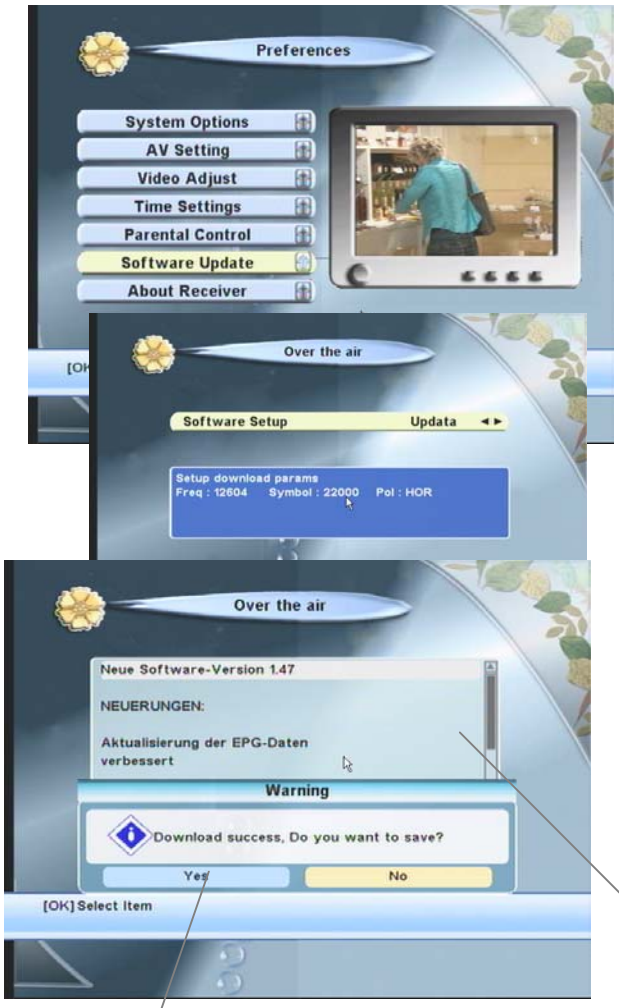
1. Enter the current password.
2. Select **ON** of Install Lock
3. Enter new password
4. Confirm your new password entering new password again
5. Exit this menu.
6. Select any menu and press **OK** on the RCU .
7. Then the **Enter Password** box will be displayed.
8. Unless you enter the correct password, you can not run any menu.

Note: Default password is 0000.

Warning: Do not forget your password.

5.6 Software- Update via Satellite

Because of continuous changes in DVB broadcasting it is also necessary to update your receivers software to be every time on the height of the time. Therefore Zehnder company offers actual upgrade software files on their homepage www.zehnder-sat.de to download to your receiver through RS 232 interface.
But the more easy and convenient way is the „upgrade via satellite“ function offered in the main menu „Receiver Information“ of the receiver. Especially use this function if you have problems with the function of the receiver or the reception of some channels.



After selecting "Yes" the software will finally be written to flash memory of the Receiver and will reboot the system. "No" will stop upgrading process without any change.

You can get al improvements of software by satellite download at ASTRA 19,2°, without any PC connection.

If you select main menu, PREFERENCES and Software Update menu, your receiver searches automatically for the ASTRA whether it broadcasts new software. The searching and downloading process can take some 30 minutes or more.

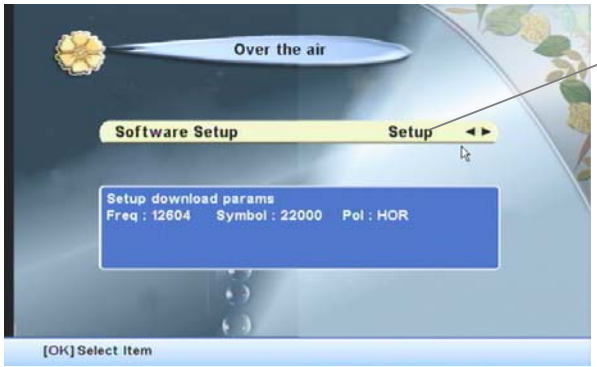
If there are no ASTRA reception or no new versions of software available, you will be informed of this by the right appropriate on-screen info box messages.

If new software has been found, you also will be informed of this by an appropriate on-screen info box message.

In order to make upgrade, select OK button, then software and upgraded information are downloaded.

The lower bar indicates the received data capacity in visual.

In this part you will be informed about the news of the upgrade version after download. Use PR▲/PR▼ buttons and OK to scroll un the information window.



To change the udate transponder switch by left/right button to “Setup” and press OK.

But typically you must not to change this setting!

If you have changed anyway it is possible that you cannot get anymore the software update. In that case you have to load factory

6. General Viewing Functions

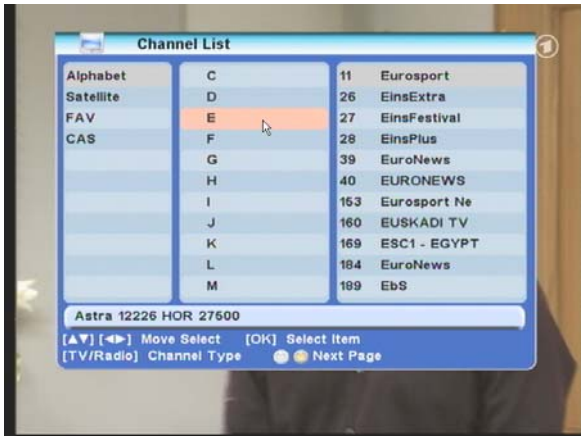
The following describes the basic functions of your ***DX 2202*** while watching satellite TV or listening to satellite radio.

6.1 Select Channel

If you want to select channel, use **CH** key on the front panel or **PR+, PR-** key on the RCU or numeric keys.

In addition to the above normal function, ***DX 2202*** provides more convenient channel change function.

While watching, press **OK** key on the RCU. A channel list will be displayed on the left side of the screen. If you press **EXIT** key, the channel list will disappear.



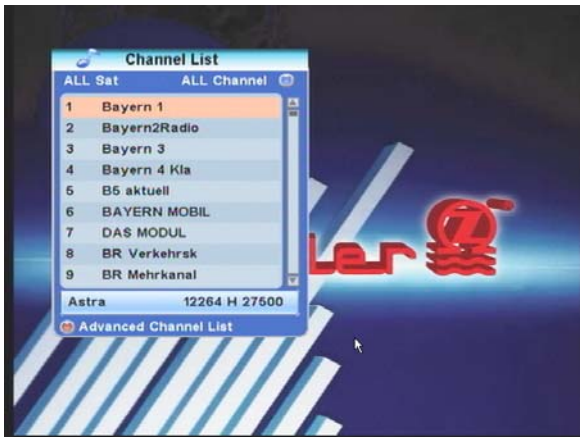
To select a channel, go up or down this channel list and place the cursor on a desired channel. Then, press **OK** key to watch the selected channel.

If you press ▲▼ key on the RCU, the channel list will scroll page by page.

If you press RED button you get into some **Channel Sort window**, where you can search for special channel names.

6.2 Previous Channel Recall

Press ⟵PR key on the RCU to move to the previous channel you watched.

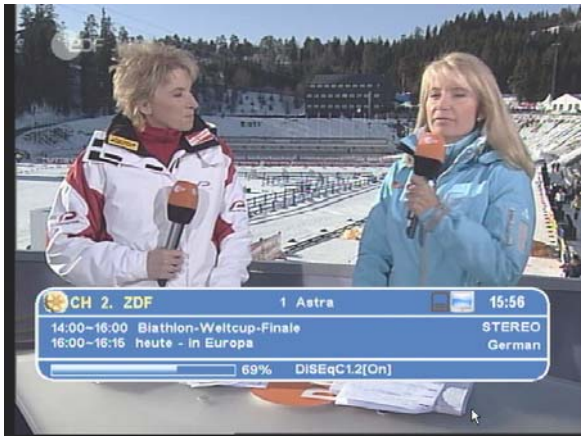


6.3 TV & Radio Mode

While viewing a TV channel, press the **TV/RADIO** key on the RCU to toggle between TV and Radio modes.

6.4 TV & VCR Mode

The TV/AV key on the RCU lets you change the mode from satellite to TV or VCR.
Press once to move the TV mode.
Press twice to move to VCR mode.
Press three tomes to move back to satellite mode. (see also content of front display)



6.5 Channel Information

Every time you change channels, you will receive program information for a few seconds.

While watching the channel you can see the current channel information at anytime by pressing the **INFO** key on the RCU.

Note: Channel information will be displayed for 5 seconds by default and will disappear. You can adjust the display time interval from 1 to 10 seconds in the Preferences menu.

6.6 Favorite List FAV

To call a favorite group list press FAV key on the RCU.

You can access the next of 8 favorite groups when you press **the BLUE button**.

The method to group favorite channels is explained in the Favorite Channel (page 23).

6.7 Volume & Audio Control

1. Volume Control

To increase or decrease volume, use - + key on the RCU.

Note: ***DX 2202*** has 33 volume levels and this can be controlled from the volume level of your TV.

2. Mute

To mute the sound, press **Mute** button on the RCU. To bring back the normal sound, press this key once again.

3. Audio Control AUDIO

Press the AUDIO key and then repeatedly to select one of three possible Audio settings (Left, Right and Stereo)

The current audio setting will be displayed in the channel information

4. Language Selection AUDIO

Press the AUDIO key on the RCU and repeatedly PR▲/PR▼ to select audio-language. This is dependent on the transmission of audio signal, e.g. AC3 Audio.

6.8 Teletext/ Subtitle

P100 100 ARDtext Do 23.03.06 18:15:21
ARDText
23 Tote bei Anschlägen in Bagdad 116
Irak: Drei Geiseln wieder frei .. 117
Neue Gespräche zu Ärzte-Tarifen . 123
Sozialhilfe: Nord-Süd-Gefälle.... 155
Glagow siegt, Disl hört auf.. 204-205
Björndalen mit 61.Weltcup-Sieg... 206
Bach soll DOSB-Präsident werden.. 233
17.55 Verbotene Liebe 320
18.20 Marienhof 321
18.50 Türkisch für Anfänger (7) 322
Inhalt (A-Z).. 101 Programm. 300/440
Tagesschau.... 112 Boulevard.... 500
Aus aller Welt 155 Ratgeber..... 520
Sport..... 200/600 Wirtschaft... 700
P100-0000
Full Screen [MENU]
Recall [RECALL]
Zoom Out [OK]
Fast Text
Select Page ▲▼ 0~9

If a channel is broadcasting either subtitle or teletext information you can see the symbol in the channel information. Easily press the button TEXT or SUBTITLE to select one of the services. For subtitle mode automatically a specific teletext page is called.

The receiver offers you a integrated teletext decoder to have direct access by the receiver remote control.

Teletext mode is easy and fast to use because up to 899 pages are stored in memory to have very fast access to each page. Directly choose page number by your remote control.

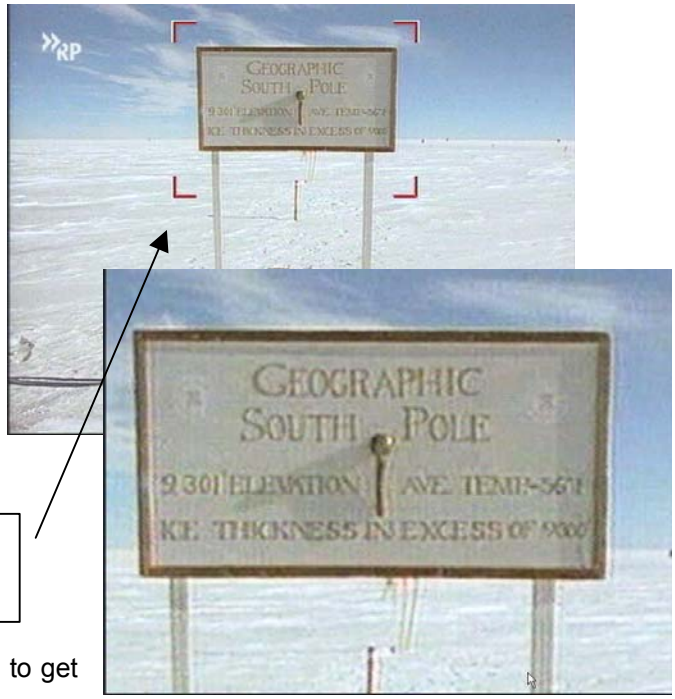
6.9 Pause the frame

Press PAUSE button (Blue button) on the RCU to pause the screen. To bring it back to the normal mode, press PAUSE key once again.

6.10 Zoom details of picture

This function allows to zoom into details of a TV picture.

1. To show the zoom marks press ZOOM button (White Button), Pressing the Zoom button repeatly extends the size of the mark picture part.
2. Move the marks to the correct part of the picture by using the arrow buttons.
3. At least press OK to zoom the picture.
   Also in zoom mode you can move the zoomed part by arrow keys on the screen.
4. Press OK again, Exit or ZOOM button to get back the full picture.

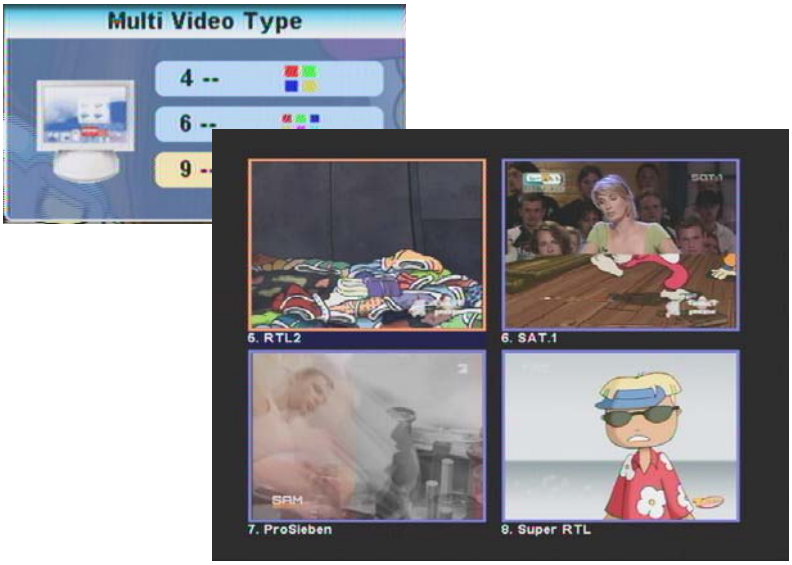


Marks of the selected picture detail

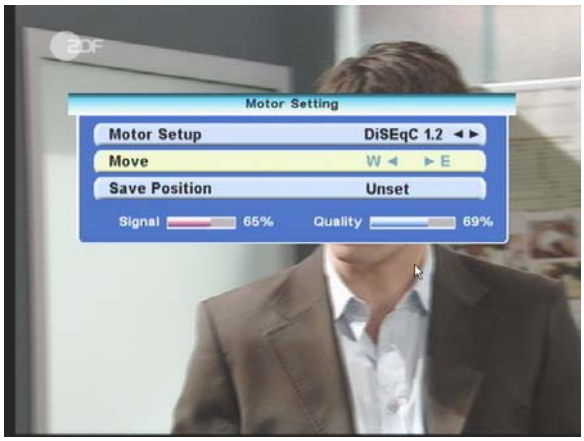
6.11 Multipicture

Using the MULTIPICTURE button you can divide the TV screen in showing 4,6, or 9 different TV channels simultaneously.

Press arrow buttons on RCU to change channels

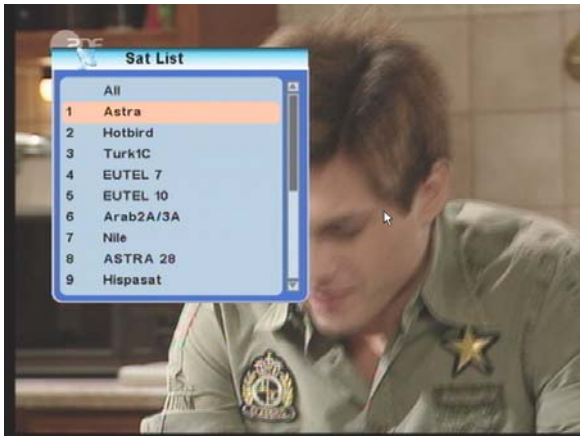


6.12 Position



If you need to adjust the antenna more accurately, press POS key on the RCU and the position menu will be displayed. Go to "Move" and press ◀▶ key on the RCU to adjust the motor driven antenna.

6.13 Sat



If you searched channels from more than one satellite and want to have a channel list for each satellite, press SAT key on the RCU, a satellite list will be displayed.

Select one satellite you want, press **OK** key on the RCU then you will have a channel list of your choice.

7. Channel Manager

DX 2202 provides one of the most powerful channel managing functions in the world. This function not only allows you to watch channels but also do a lot of interesting and useful things.

7.1 Channel Manager

Channel manager consists of Edit channel and Set Favorites, which contain similar menu structures.

Note: Since the usage of Radio Channel is same as that of TV channel, in this manual only TV Channel manager is explained. You only have to press TV/Radio button to switch between the lists.

On the left side of the TV channel menu, you can see the channel list. On the right side, you can watch the current channel in small Picture in Graphic (PIG) mode (1/9 size of the normal mode). You can also see channel information under the PIG screen.

When you move the cursor from one channel to another, the PIG will change accordingly.

You can use those color keys on the RCU as below.

1. Delete mode (Red key)
2. Lock mode(Green key)
3. Move mode (Yellow key)
4. Sort mode (Blue key)
5. Rename mode (White key)

7.2 Move Channel

In the TV channel manager page, press **Move** key (Yellow color key) on the RCU.

Select a channel by pressing **OK** key. You can mark more than one channel by the same procedure. Then press again Yellow color Key to start moving the cursor to the location where you want to move the selected channel and press **OK** key. Then, you will find that the selected channel has moved to the desired location and channel the number has changed accordingly. The other channels behind will be moved and renumbered automatically.

7.3 Lock Channel

In the TV channel manager page, press **Lock** key (green color key) on the RCU.This **Lock** command allows you to lock the channe First select the channel, which you want to lock, and press **OK** key. Then this will be marked beside the selected channel name.

Note: To perform this function, you should set up the Parental Lock in advance.

7.4 Rename Channel

In the Main Page, press **Rename** key (white color key) on the RCU.

This Rename command allows you to rename the channel. First select the channel to be renamed and press **OK** key, then a Keypad dialog box will be displayed. Enter the desired name. Check whether the channel name is changed on the channel list.

7.5 Delete Channel

In the Channel manager, you can enter Delete CH mode, if you press **Delete** key (Red color key) on the RCU.

This Delete command allows you to delete the channel permanently. First select the channels, which you want to delete; the selected channel number will be marked to **"X"**. If you cancel the selection, press **OK** key again, then the marked number will be back.

If you decide to delete, press **EXIT** key and then press **OK** to delete.

If you press Delete SAT (Red color key) again, all channels of the whole satellite will be marked to be deleted.

If you press Delete TP (Yellow color key) again, all channels of selected transponder frequency will be marked to be deleted.

If you press Delete ALL (White color key) again, all channels of the whole channel list will be marked to be deleted.

Warning: The deleted channel cannot be recovered unless you search again.

7.6 Sort Channel

In the Main Page, press **MENU** key on the RCU, or press **Sort** key (blue color key) on the RCU and then open sort options by OK button.

This Sort menu has a sub command and it allows you to sort the channels, as you like.

You can sort the channels by Alphabet, Satellite, FTA, Scramble (CAS) and original sequence (Normal). Place the cursor on the desired line, and then press **OK** key.

Check whether the channels are sorted properly on the channel list.

Note: Radio Channel Manager has the same operation as TV channel Manager.

7.7 Favorite Channel

When you select channel manager and then Set Favorites menu the list will be shown on screen as name “Favorite”. Press **FAV** key repeatedly to switch between 8 different favorite groups as News, Sports, Kids, Movies, Music, Science, Fashion.

Select your favorite channel and then press **OK** key. Then ☻ will be marked next to your selected channel name.

If you want to remove the channel name from the favorite channel list, press **OK** key once again, then the ☻ mark will disappear.

After the selection of favorite channels press **EXIT** key twice to save data.

- **How to make a favorite group**

1. When you enter channel manager, the default favorite group will be shown once on the screen as Favorite.
2. If you press favorite key on the RCU, a next favorite group can be created as Favorite 2, e.g. News, Sports, music, …..

- **How to edit the name of a Favorite grou p**

1. In the favorite mode, press RED key on the RCU then the command box will be displayed on the screen.
2. You can edit the name by using the keypad.

8. EPG (Electronic Program Guide)

DX 2202 provides EPG function for you to get access to the TV Guide (or Radio Guide if you are listening to radio channels) that will show the titles and other information of the current and next programs on different channels. The information is only available from the network to which the channel you are watching.

To see the EPG data, press **EPG** key on your RCU when watching a channel.

The **EPG** box will be displayed.

You can see the channel in the PIG screen; channel list at the bottom side and Program schedule for selected channel will be displayed on the right side. The time related to the program schedule is also displayed.

Detail Info

Select one channel and placing the mark ▼ on the time of Program name which detail information you want to know. If there is detail information of the channel, press **Detail Info** (Blue color key) key on the RCU, for the detail information box to be displayed.

If you want to check the previous or next information of the channel, please press +6:00 key (Green color key) or –6:00 key (Red color key) on the RCU.

Note: A 'No data available" message will be shown if the selected channel does not provide EPG data.

Timer programming through EPG

One easy way to program a timer event for automatic switch on/off is using this Program Guide menu. Just select the channel line and mark the event you want to choose and press Yellow button on RCU to open the Timer Event window. There you can choose the status of timer whether it should be one time (Once), Daily or Weekly. Confirm by OK button.

This timer event will be added to general Timer menu list (see main menu "Timer"), where you can edit the data.

9. Timer

In this menu you can program the timer in various ways. This function is one of the strong points of ***DX 2202***. One basic condition for the correct operation of this function is the correct time displayed at the top right of the timer menu window.

Time Adjust

Usually you get the information real time from the satellite automatically but sometimes they transmit wrong information. In that case, you have to check the actual time and you may have to adjust the real time by unplugging the receiver from power for some seconds..

Timer
09 : 02
Timer Type Channel Mon Date Start Stop Status
1 TV 1. Das Erste 3 24 09:05 09:55 Once
2 TV 3. RTL Televisi 3 24 11:00 11:30 Daily
3 TV None 3 24 09:02 09:02 Off
4 TV None 3 24 09:02 09:02 Off
5 TV None 3 24 09:02 09:02 Off
6 TV None 3 24 09:02 09:02 Off
7 TV None 3 24 09:02 09:02 Off
8 TV None 3 24 09:02 09:02 Off
9 TV None 3 24 09:02 09:02 Off
[▲▼][◄►] Move Select
[OK] Display List
Reset Timer

Time Reservation

Either you can program a timer event through the EPG data (see EPG) or directly in the Timer Event Table of this menu. Timer can be activated by "**Once**", "Daily", or "Weekly" option in right column.

9 different events can be programmed at maximum number. Each line is one event showing the channel, start and stop time.

1. First mark one Timer event line and step by step move right with arrow buttons on RCU.
2. **Type**: Select whether you want to drive a TV or Radio channel
3. **Channel**: Select channel by opening the channel list wit OK button.
4. **Mon/Date**: Use number keys to fix the data by month and day.
5. **Start/Stop**: Use number buttons on RCU to key in the wished start and stop time.
6. **Status**: Don´t forget to switch the status from Off to once, daily or monthly.

10. Front Panel Display

: UP LOAD PROCEDURE

: VCR MODE

: DOWN LOAD PROCEDURE

: SYSTEM WAITING

: ERROR IN DATA TRANSMITTING

: FLASH ROM ERROR

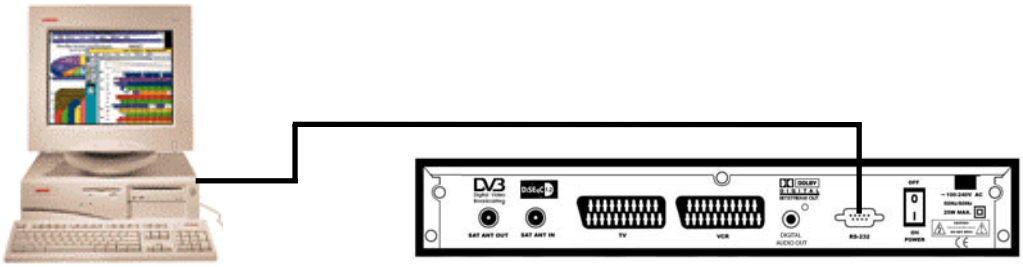
: TV MODE

: SYSTEM BOOTING

11. Software-Update via RS 232

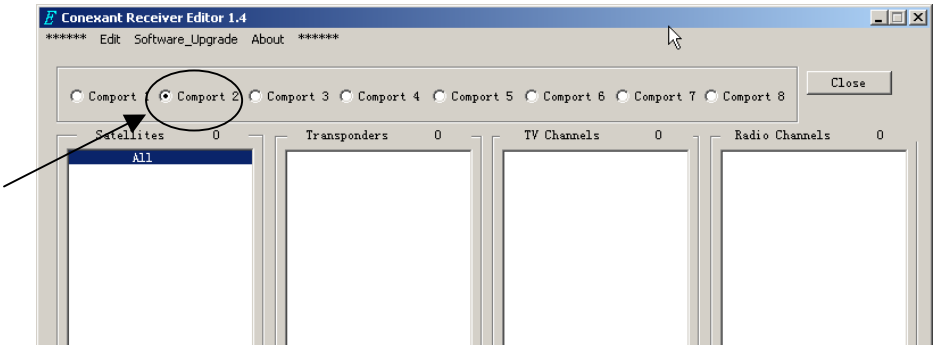
For this receiver you can download new software from Zehnder homepage http://www. zehnder-sat.de to up-grade your receiver with new operating system and new channel list by using RS232 interface and programm editor „CREdit “ . Find at support area ´Download //Software Update´. Then select respective receiver type.
With this software you also can prepare your personal channel list at the PC by sorting, moving, deleting, changing, adding channels in a very easy way.

1. Connect receiver to your PC using RS232 cable.



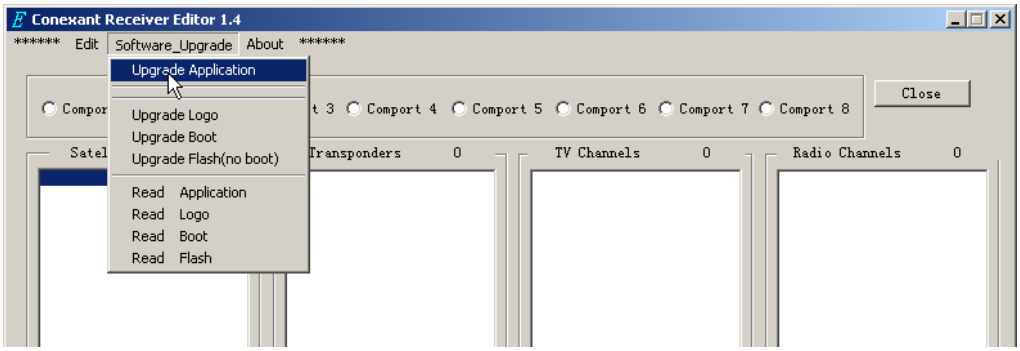
2. Turn on the receiver and check the Front Display shows channel number

3. Run CREdit software in your PC, then the editor main window will be displayed.

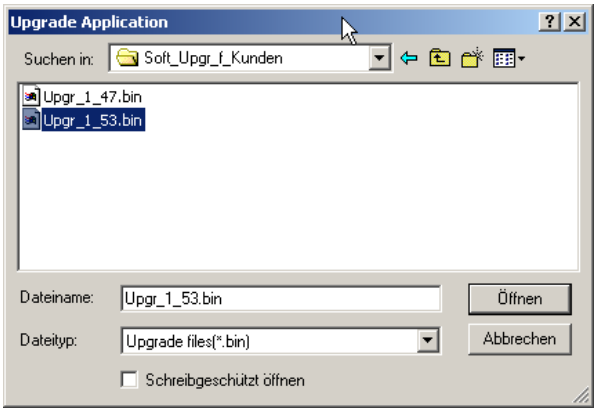


4. Below the command line, select Com-Port connected to the receiver

5. Call “Software_Upgrade” Menu from Main Menu and select „Upgrade Applikation“



6. You can see file window. Select and open the „rom.bin“ file to be upgraded.



7. During the download, your PC and Front panel of the receiver will display the procedure situation.

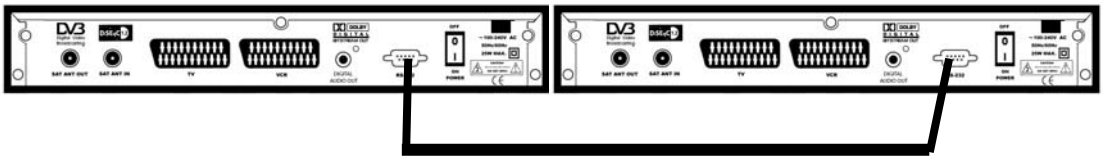
8. After completed Download, the receiver automatically writes downloaded data in its Flash Rom. Please wait until it displays “ good ” message on the Front Panel Display. Receiver has to be re-booted by power off/on if the procedure is completed.

12. Easy plug-and-play data transfer without PC

Below you can find another easy method to upgrade operating software by easy plug-and-play data transfer from one receiver to the other.

1. Notice that both receivers, master and slave, are powered off .

2. Connect one receiver to another receiver by using RS 232 cable.



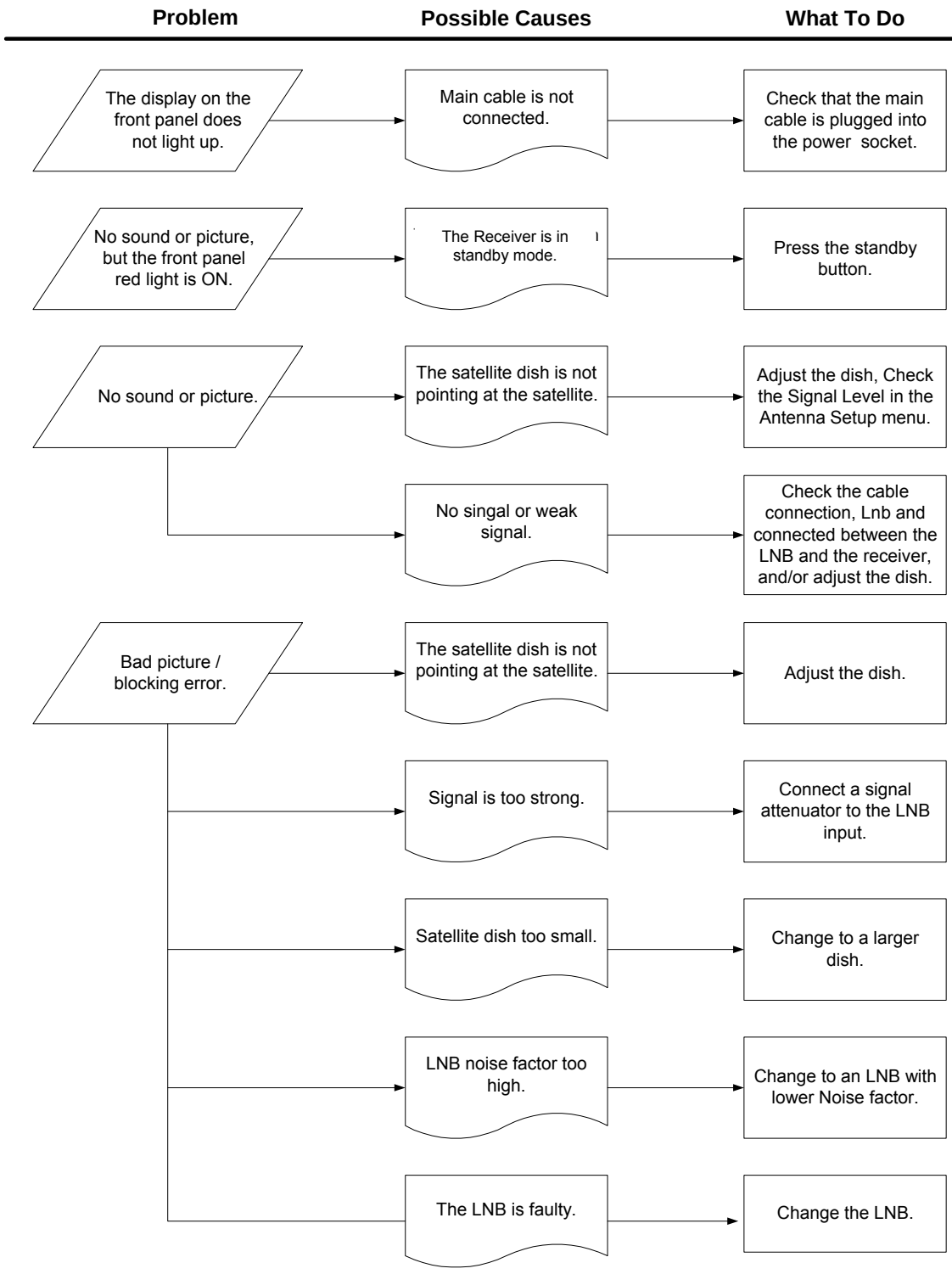
3. Switch your master receiver to stand-by mode.

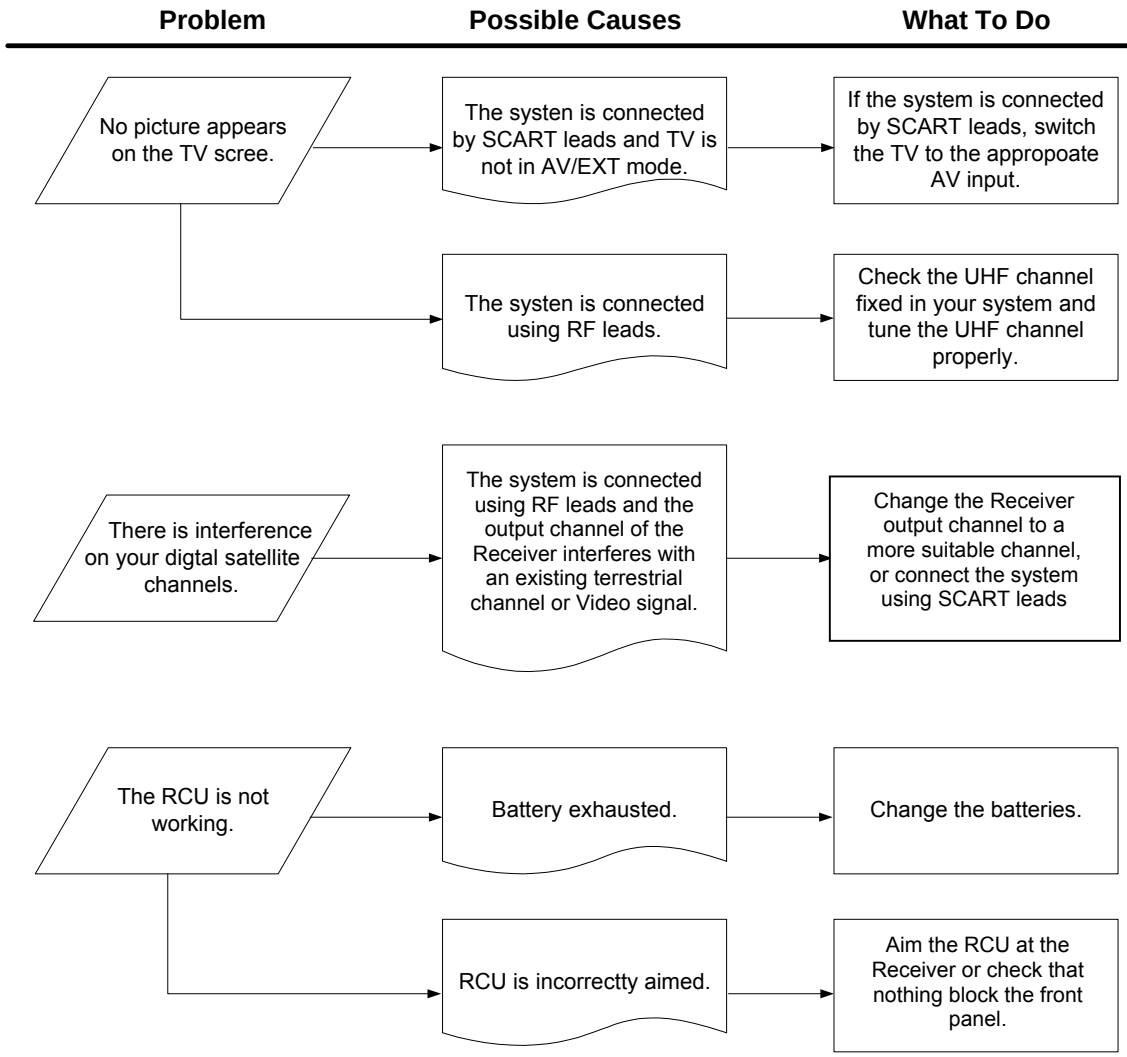
4. Turn on the slave receiver by Power ON/OFF and check the front display is "d.000". From now on the slave receiver will be upgraded.

5. During the download the receiver front display will show the progress of the procedure, e.g. "d.062" means 62% data transfer finished.

6. After completed download, the receiver automatically writes downloaded data in its Flash Rom. Please wait until it displays “good” message on the Front Panel Display. Receiver has to be re-booted by power off/on if the procedure is completed.

13. Trouble Shooting


Problem
Possible Causes
What To Do
The display on the front panel does not light up.
Main cable is not connected.
Check that the main cable is plugged into the power socket.
No sound or picture, but the front panel red light is ON.
The Receiver is in standby mode.
Press the standby button.
No sound or picture.
The satellite dish is not pointing at the satellite.
Adjust the dish, Check the Signal Level in the Antenna Setup menu.
No singal or weak signal.
Check the cable connection, Lnb and connected between the LNB and the receiver, and/or adjust the dish.
Bad picture / blocking error.
The satellite dish is not pointing at the satellite.
Adjust the dish.
Signal is too strong.
Connect a signal attenuator to the LNB input.
Satellite dish too small.
Change to a larger dish.
LNB noise factor too high.
Change to an LNB with lower Noise factor.
The LNB is faulty.
Change the LNB.


Problem
Possible Causes
What To Do
No picture appears on the TV scree.
The systen is connected by SCART leads and TV is not in AV/EXT mode.
If the system is connected by SCART leads, switch the TV to the appropoate AV input.
The systen is connected using RF leads.
Check the UHF channel fixed in your system and tune the UHF channel properly.
There is interference on your digtal satellite channels.
The system is connected using RF leads and the output channel of the Receiver interferes with an existing terrestrial channel or Video signal.
Change the Receiver output channel to a more suitable channel, or connect the system using SCART leads
The RCU is not working.
Battery exhausted.
Change the batteries.
RCU is incorrectty aimed.
Aim the RCU at the Receiver or check that nothing block the front panel.

Note: If you have tried all of the actions suggested above, and couldn't solve the problem; please contact your dealer or service provider.

14. SPECIFICATIONS

CPU & Memory	
CPU	CX24142
Processing Speed	133MHz
Program memory (Flash)	1 Mbyte
Decoding Memory(RAM)	8 Mbyte
Tuner & Channel	
Connector	2 x F-Type, 3/8-32UNEF-2A
1 IF Loop through	Yes
Frequency Range	950 to 2150 MHz
Digital Signal Input Level	-25 to -65dBm
LNB Supply	13.0V / 18.0V (max.400mA), Short Circular Protection
22KHz Tone	Frequency:22 ± 4KHz
DiSEqC Control	Version1.0/ 1.2 Compatible
Demodulation	QPSK
Input Symbol Rate	2 to 45 MSPS
FEC Decoder	Convolutional Code Rate 1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7
MPEG Transport Stream A/V Decoding	
Transport Stream	MPEG-2 ISO/IEC 13818, Transport stream specification
Aspect Ratio	4:3; 16:9
Output System	PAL/NTSC/SECAM/AUTO
Audio Decoding	MPEG layer I and II, Musicam
Audio Mode	Stereo Channel, Dual Mono, Joint Stereo Channel, Mono
Sampling Rate	32, 44.1 and 48KHz
Digital Audio	SPDIF with AC-3 loop through (AC3: optional; license based)
A/V Data In/Out	
TV SCART	VIDEO Output (CVBS, RGB)
	AUDIO Output
VCR SCART	VIDEO Output (CVBS)
	VIDEO Input (CVBS, RGB)
SPDIF	Digital Audio Output
RS-232 Data Port	9 pin D-sub Type, Baud rate 115200Kbps
Environment	
Operating Temperature	0°C ~ +40°C
Storage Temperature	- 40°C ~ +65°C
Power Supply	
Main input voltage	100 ~240V AC @ 50Hz/60Hz
Type	SMPS
Nominal power consumption	Max. 30W, standby 7 W
Physical Specification	
Size (W x H x D)	280mm x 205mm x 42mm
Weight (Net)	About 1.3Kg

· Specification and functions may be changed for improvement without notice in advance.

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03.06 Änderungen vorbehalten!

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